Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (previously presented) An isolated biopolymer marker consisting of SEQ ID NO:1 or consisting of SEQ ID NO:2.

Claims 2-38. (cancelled)

Claim 39. (previously presented) A method for determining in a patient sample the presence of a biopolymer marker consisting of SEQ ID NO:1 or consisting of SEQ ID NO:2 which is linked to Type II diabetes comprising:

(a) obtaining a sample from a patient;

(b) conducting mass spectrometric analysis on said sample in a manner effective to maximize analysis of peptide fragments contained therein and comparing mass spectrum profiles of said biopolymer marker consisting of SEQ ID NO:1 or consisting of SEQ ID NO:2 to mass spectrum profiles of peptides obtained and analyzed from said sample; and

(c) confirming the presence of said biopolymer marker

consisting of SEQ ID NO:1 or consisting of SEQ ID NO:2 in said sample displaying a peak profile at about 1624 daltons or at about 1552 daltons in said mass spectrum profile;

wherein the presence of said biopolymer marker consisting of SEQ ID NO:1 or consisting of SEQ ID NO:2 is indicative of a link to Type II diabetes.

Claim 40. (previously presented) The method of claim 39, wherein said sample is an unfractionated body fluid or a tissue sample.

Claim 41. (previously presented) The method of claim 39, wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 42. (previously presented) The method of claim 39, wherein said mass spectrometric analysis is selected from the group consisting of Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS), Maldi Qq TOF, MS/MS, TOF-TOF, ESI-Q-TOF and ION-TRAP.

Claim 43. (previously presented) The method of claim 39, wherein said patient is a human.

Claim 44. (previously presented) A kit for determining the presence of a biopolymer marker consisting of SEQ ID NO:1 or consisting of SEQ ID NO:2 comprising:(a) a biopolymer marker consisting of SEQ ID NO:1 or consisting of SEQ ID NO:2, and (b) an antibody that binds to said biopolymer marker consisting of SEQ ID NO:1 or consisting of SEQ ID NO:2 in a sample from a patient.

Claim 45. (previously presented) The kit of claim 44, wherein said antibody is immobilized on a solid support.

Claim 46. (previously presented) The kit of claim 44, wherein said antibody is labeled.